Product Information

Catalog # Description

Premixed Sample Buffers

161-0737 **2x Laemmli Sample Buffer,** 30 ml
161-0747 **4x Laemmli Sample Buffer**, 10 ml
161-0710 **2-Mercaptoethanol**, 25 ml
161-0738 **Native Sample Buffer**, 30 ml
161-0739 **Tricine Sample Buffer**, 30 ml
161-0767 **5x Nucleic Acid Sample Buffer**, 10 ml
161-0768 **TBE-Urea Sample Buffer**, 30 ml
161-0763 **IEF Sample Buffer**, 30 ml
161-0764 **Zymogram Sample Buffer**, 30 ml

Premixed Buffers

161-0732 **10x Tris/Glycine/SDS**, 1 L
161-0772 **10x Tris/Glycine/SDS**, 5 L
161-0734 **10x Tris/Glycine**, 1 L
161-0771 **10x Tris/Glycine**, 5 L

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4006028 Rev J

2x Laemmli Sample Buffer

Catalog #161-0737

4x Laemmli Sample Buffer

Catalog #161-0747

BIO-RAD

Introduction

Bio-Rad's Laemmli sample buffers are based on the method of Laemmli (1970). The use of Laemmli sample buffers ensures optimal band resolution when preparing proteins for SDS-PAGE with Tris-glycine-SDS running buffer.

Formulations

2x Laemmli sample buffer	65.8 mM Tris-HCl, pH 6.8 26.3% (w/v) glycerol 2.1% SDS 0.01% bromophenol blue
4x Laemmli sample buffer	277.8 mM Tris-HCl, pH 6.8 44.4% (v/v) glycerol 4.4% LDS 0.02% bromophenol blue
Storage	Room temperature
Shelf life	2 years from date of manufacture

Instructions for Use

1. **Add Reducing Agent**
   To obtain a final 1x concentration of 355 mM 2-mercaptoethanol
   2x Laemmli sample buffer: Add 50 µl of 2-mercaptoethanol per 950 µl.
   4x Laemmli sample buffer: Add 100 µl of 2-mercaptoethanol per 900 µl.
   Alternatively, add dithiothreitol (DTT or Cleland's reagent) to a final 1x concentration of 50 mM.
   Note: For best results, do not store sample buffer with 2-mercaptoethanol.

2. **Dilute Sample**
   2x Laemmli sample buffer: Dilute 1 part sample with 1 part 2x Laemmli sample buffer.
   4x Laemmli sample buffer: Dilute 3 parts sample with 1 part 4x Laemmli sample buffer.
   More sample buffer can be added if necessary.

Reference

Laemmli UK (1970). Cleavage of structural proteins during the assembly of the head of bacteriophage T4, Nature 227. 680–685.